Revisions Under Consideration for the Upland Erosion Control, Revegetation, and Maintenance Plan

December 2001

Section	Changed, Added, or Deleted	Original 1994 Version	Revision Under Consideration
II. A	Deleted	Before construction begins on a project that will disturb more than 5 acres of land, the project sponsor must file with the Secretary a copy of its Stormwater Pollution Prevention Plan prepared for compliance with the U.S. Environmental Protection Agency's National Stormwater Program General Permit requirements. This plan must be available in the field on each construction spread and shall include a Spill Prevention, Containment, and Countermeasure Plan (see section IV.A. of the Procedures).	*FERC would not require a copy of the Stormwater Pollution Prevention Plan (SWPPP) to be filed with the Secretary. However, the project sponsor would be required to comply with the Environmental Protection Agency's National Pollution Discharge Elimination System requirements, which include the preparation of a SWPPP for all projects disturbing more than 1 acre of land.*
III. A. 1	Changed	At least one Environmental Inspector is required for each construction spread during active construction or restoration.	*This section would be revised to specify the number and experience of Environmental Inspectors assigned to each construction spread should be appropriate for the length of the construction spread and the number/significance of resources affected.*
III. B.	Changed	Responsibilities of Environmental Inspectors	*The responsibilities of the Environmental Inspectors (EIs) would be further clarified in this section, including: clearly defining the EIs' role in overseeing and documenting corrective actions to resolve non-compliances; the EIs' role in marking sensitive resources; and the EIs' role in highlighting areas needing attention during restoration.*

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IV. A.	Added	Drain Tile and Irrigation Systems	*This section would be expanded to further address drain tile and irrigation systems. The FERC staff is considering requiring the project sponsor to: verify and report the location of existing drain tiles and irrigation systems; develop procedures for constructing through drain tiles and irrigation systems; and engage a qualified drain tile specialist to monitor and/or manage repairs to drain tiles and irrigation systems.*
V. A. 1	Changed	Confine construction activity and ground disturbance to certificated areas.	*This item would be expanded to address common off-right-of-way activities, such as energy dissipaters, dewatering structures, and drain tile repair.*
V. A. 2 - 3	Changed	The construction right-of-way width shall not exceed that described in the project sponsor's FERC application unless otherwise modified by a certificate condition. However, additional construction right-of-way may be used (subject to compliance with all applicable survey and mitigation requirements) in limited areas for full right-of-way width topsoil segregation or where topographic conditions, such as side-slopes, require it to ensure safe construction. In no case shall the construction right-of-way width exceed 100 feet without the prior written approval of the Director of OPR.	*Revisions are being considered to allow for a wider right-of-way width for certain activities (e.g., topsoil salvage, safe construction, truck turn arounds) without prior written approval of the Director of Office of Energy Projects (OEP). In such cases, cultural and endangered species surveys would be required, so the project applicant would be encouraged to expand the survey area during pre-construction surveys in anticipation of the need for limited activities outside of certificated work areas.*

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V. B. 1. a	Changed	Use topsoil segregation methods in all residential areas and when the construction right-of-way is wider than 30 feet in: annually cultivated or rotated agricultural lands (except pasture);	*This section would be revised to include pastures.*
V. B. 2	Added	Prevent the mixing of topsoil with subsoil by stripping topsoil from either the full work area or from the trench and subsoil storage area (ditch plus spoilside method).	*The FERC staff is considering expanding this item to require full-width topsoil stripping in areas that require grading.*
V. F. 1	Changed	Construct temporary slope breakers using the written recommendations of the local soil conservation authorities. In the absence of these recommendations, install temporary slope breakers at the following spacing: 5-15 % (300 ft); 15-30 % (200 ft); and >30 % (100 ft).	*This section would be revised to specifically require, at a minimum, temporary slope breakers on slopes greater than 5 percent that are within 50 feet of a waterbody, wetland, or road crossings at the spacing outlined in the '94 version. For other areas, temporary slope breakers would be constructed using the written recommendations of the local soil conservation authorities, if provided, and as determined appropriate by the Environmental Inspector at the time of construction.*
V. F. 2. a - f	Changed	Sediment Barriers	*This section would be revised to allow driveable berms or other appropriate materials to be used as sediment barriers and to provide guidelines on when and where to install sediment barriers in the vicinity of wetlands, waterbodies, and roads.*

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Section	Changed, Added, or Deleted	Original 1994 Version	Revision Under Consideration
V. F. 3. c. 2	Changed	Mulch before seeding if: final cleanup, including final grading and installation of permanent erosion control measures, is not completed in an area within 10 days after the trench in that area is backfilled;	*The FERC staff is considering extending the final cleanup requirement to 20 days after the trench is backfilled.*
New Section	Added		*A new section would be added for residential construction. The section may provide detailed requirements for landowner agreements, landowner construction notifications, temporary fencing, access issues, duration of construction, dust control, and cleanup and restoration requirements in residential areas.*
VI. A. 1	Changed	Make every effort to complete final cleanup of an area (including final grading and installation of permanent erosion control structures) within 10 days after backfilling the trench in that area. If this schedule cannot be met, final cleanup must be completed as soon as possible. In no case shall final cleanup be delayed beyond the end of the next recommended seeding season.	*This section would be revised to clarify the overall timing requirements for cleanup activities and would increase the 10-day limit to 20 days. This item would also address temporary and permanent erosion control measures required during and after final cleanup.*
VI. A. 4	Deleted	Make diligent efforts to remove stones greater than 4 inches if the off right-of-way areas do not contain stones greater than 4 inches.	*The FERC staff is considering removing this sentence from item 3, in an effort to base rock removal requirements on off-right-of-way concentrations and landowner agreements.*

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Section	Changed, Added, or Deleted	Original 1994 Version	Revision Under Consideration
VI. B. 1. d	Changed	Install trench breakers at the base of slopes adjacent to waterbodies and wetlands and where needed to avoid draining of a wetland.	*This item would be revised to require trench breakers, at a minimum, at the base of slopes greater than 5 percent that are within 50 feet from the boundary of a waterbody or wetland and in areas, as necessary, to prevent draining a wetland. This item would also be amended to encourage the use of a qualified engineer to determine the location and spacing of trench breakers on slopes.*
VI. B. 2. c	Changed	Construct slope breakers with a 2 to 8 percent outslope to divert surface flow to a stable area.	*The FERC staff is considering changing the percent outslope from 2 to 8 percent to 2 to 5 percent.*
VI. D. 3. d	Changed	Seed slopes steeper than 33 percent immediately after final grading, weather permitting, subject to the specifications in section VI.D.3.a-c.	*This item would be revised to require seeding of slopes greater than 33 percent within 24 hours of final grade.*
VI. D. 3. g	Changed	Treat legume seed with an inoculant specific to the species. For conventional seeding, use 4 times the manufacturer's recommended rate of inoculant. For hydroseeding, use 10 times the recommended rate of inoculant.	*This item would be revised to use the manufacturer's recommended rate of inoculant when seeding with legume seed.*

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Section	Changed, Added, or Deleted	Original 1994 Version	Revision Under Consideration
VI. D. 3. i	Changed	In the absence of recommendations referred to in section VI.D.3.h. above, a seed drill equipped with a cultipacker is preferred for application, but broadcast or hydroseeding can be used at double the recommended seeding rates. Where seed is broadcast, firm the seedbed with a cultipacker or roller after seeding.	*Additional guidelines may be provided in this section to address rocky soil conditions where the effectiveness of the listed equipment is limited and to allow the Environmental Inspector to approve other methods.*
VIII. A. 3	Changed	Revegetation shall be considered successful if upon visual survey the density and cover of non-nuisance vegetation (or crops in cultivated cropland) are similar in density and cover to adjacent undisturbed lands. If vegetative cover and density are not similar or there are excessive noxious weeds after two full growing seasons, a professional agronomist shall determine the need for additional restoration measures (such as fertilizing or reseeding). Implement the measures recommended by the agronomist.	*This section would be expanded to further clarify success criteria for agricultural lands and to distinguish between revegetation of non-agricultural areas and agricultural areas.*

Revisions Under Consideration for the Wetland and Waterbody Construction and Mitigation Procedures

December 2001

Section	Changed, Added, or Deleted	Original 1994 Version	Revision Under Consideration
I. C. 2	Changed	"wetland" includes any area that satisfies the requirements of the current Federal methodology for identifying and delineating wetlands.	*The definition of "wetland" would be amended to exclude areas in cultivated cropland.*
IV. A	Changed	Preconstruction Planning	*The FERC staff may revise this section to specify requirements for hazardous materials use, transfer, storage, and cleanup.*
V. B. 1	Changed	Unless expressly permitted or further restricted by the appropriate state agency in writing on a site-specific basis, crossings must be constructed during the following time windows:	*This item would be slightly modified to clarify that the time window applies to the actual instream work.*
V. B	Added	Installation	*A new item would require all equipment crossing a waterbody (including clearing equipment) to use an equipment bridge. This measure would be elaborated in Section V. B. 5.*
V. B. 2. b	Changed	Locate all extra work areas (such as staging areas and additional spoil storage areas) at least 50 feet away from waterbody boundaries, where topographic conditions permit. If topographic conditions do not permit a 50-foot setback, these areas must be located at least 10 feet from the water's edge.	*This item would be revised to exempt cultivated cropland.*
V. B. 5	Changed	Equipment Bridges	*The FERC staff may modify this section to specify that only equipment required to install the equipment bridge would be allowed to cross the waterbody prior to installation of a bridge.*

Section	Changed, Added, or Deleted	Original 1994 Version	Revision Under Consideration
V. B. 6	Changed	Dam and Pump	*The FERC staff may revise this section to allow the dam and pump method without prior approval where pumps can adequately transfer streamflow volumes around the work area. Additionally, this section would specify requirements for using the dam and pump method.*
V. B. 7. c	Changed	Describes crossings of minor waterbodies.	*The FERC staff is considering revising this section to require that the "dry-ditch" or HDD method be used on all minor and intermediate waterbodies designated as coldwater fisheries and those cool and warmwater fisheries considered significant by the state.*
V. B. 7. d	Changed	For minor waterbody crossings not covered by section V.7.c., complete construction in the waterbody (not including blasting) within 24 hours. Limit use of equipment operating in the waterbody to that needed to construct the crossing.	*This item may be expanded to clarify the activities that would be required to be completed within 24 hours, including: trenching, pipe installation, backfilling, and restoration of the streambed contours.*
V. B. 9	Changed	The project sponsor shall develop and file with the Secretary detailed, site-specific construction procedures (including scaled drawings identifying all areas to be disturbed by construction) for each major waterbody crossing, as defined in section I.C.1.c. for review and written approval by the Director of OPR before construction. This requirement does not apply to offshore pipeline construction.	*This item may be amended to provide detailed requirements for site-specific waterbody construction plans, including drawings of the locations of spoil storage areas and sediment control structures. This section would encourage the development of such site-specific plans in consultation with the appropriate state and Federal agencies.*

Revisions Under Consideration for the Wetland and Waterbody Construction and Mitigation Procedures

December 2001

Section	Changed, Added, or Deleted	Original 1994 Version	Revision Under Consideration
V. B. 10. a	Changed	Install sediment barriers across the entire construction right-of-way at all waterbody crossings.	*This item may be amended to clarify the use of temporary sediment barriers across the entire construction right-of-way and to provide examples of acceptable sediment barriers for this use (e.g., driveable berms, removable sediment barriers).*
V. B. 10. c	Changed	Use trench plugs at all non-flumed waterbody crossings to prevent diversion of water into upland portions of the pipeline trench and to keep any accumulated trench water out of the waterbody. Trench plugs must be of sufficient size to withstand upslope water pressure.	*This item would be revised to include the use of trench plugs at all waterbody crossings to prevent diversion of water into upland portions of the pipeline trench and to emphasize the importance of dewatering the trench, where necessary, to prevent overflow or failure of a trench plug.*
V. C. 3	Changed	Return all waterbody banks to preconstruction contours.	*This item would be amended to allow restoration of streambanks to a more stable angle of repose when returning them to the original contours would result in unstable restored banks.*
V. C. 8	Changed	For each waterbody crossed, install a permanent slope breaker and a trench breaker at the base of slopes near the waterbody. Locate the trench breaker immediately upslope of the slope breaker.	*The FERC staff may revise this section to specify that, at a minimum, a permanent slope breaker must be built across the right-of-way at the base of slopes greater than 5 percent that are less than 50 feet from a waterbody or wetland and in other areas, as needed, to prevent sediment transport into a waterbody or wetland. This item also may be amended to allow the Environmental Inspector to approve an earthen berm adjacent to a waterbody or wetland, if suitable.*

Revisions Under Consideration for the Wetland and Waterbody Construction and Mitigation Procedures

December 2001

Section	Changed, Added, or Deleted	Original 1994 Version	Revision Under Consideration
VI. B. 1	Changed	The project sponsor shall conduct a wetland delineation using the current Federal methodology and file a wetland delineation report with the Secretary before construction. This report shall identify: by milepost all federally delineated wetlands that would be affected;	*This item would be amended to require vernal pools affected by the project to be included in the wetland delineation report. The wetland delineation report would also need to describe the existing physical condition, uniqueness, and value of each wetland using the assessment criteria of the COE and appropriate state agencies.*
New Section	Added	Wetland Crossings Section VI. B. 1	*The FERC staff may add an item to address agricultural wetlands. This item would exempt agricultural wetlands from the wetland crossing requirements of the Procedures.*
New Section	Added	Installation Section VI. C. 1	*The FERC staff may add an item requiring wetland and stream boundaries to be clearly marked in the field with signs and/or highly visible flagging until restoration is complete.*
New Section	Added	Installation Section VI. C. 1	*The FERC staff may add a measure permitting the use of the right-of-way in a wetland for access when wetland soils are dry or appropriately stabilized.*
New Section	Added	Crossing Section VI. C. 2	*The FERC staff may add an item to clarify that stringing and welding of pipe adjacent to the trench is allowable in some (dry) wetlands.*
VI. E. 3	Changed	Monitor the success of wetland revegetation annually for the first 3 to 5 years after construction.	*This item may be amended to require an annual report for the first 3 to 5 years after construction or until revegetation is successful.*